

Mineral Industry Surveys

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SILICON IN AUGUST 2002

In August, domestic production of silicon ferroalloys plus metal, excluding silvery pig iron, was estimated to have decreased by 2% compared with the corresponding figure for the previous month, according to the U.S. Geological Survey. Domestic shipments decreased by 8% compared to those in July. Total producer stocks were estimated to have decreased by about 11% from those in July. All domestic data for ferrosilicon have been combined to avoid disclosing company proprietary data.

The July trade data included in this report indicate that the

volume of silicon metal imports increased by 56% compared with that of June 2002, owing primarily to an increase in the trade category of "99.00%-99.99% silicon." Total ferrosilicon imports, on a gross weight basis, decreased substantially, by about 27%, with significant decreases in the trade categories of "55%-80% silicon, over 3% calcium," and "55%-80% silicon, other." There were increases in the other ferrosilicon trade categories. On a gross weight basis, both total ferrosilicon and silicon metal exports decreased by 6% when compared to those in July 2002.

Prices, cents per pound, silicon content

	<u>50% Ferrosilicon¹</u>	<u>75% Ferrosilicon²</u>	<u>Silicon Metal²</u>
August 7	44.0-46.0	33.0-37.0	52.0-54.0
August 14	44.0-46.0	33.0-37.0	52.0-54.0
August 21	44.0-46.0	34.0-36.0	52.0-53.0
August 28	44.0-46.0	34.0-36.0	52.0-53.0

¹Source: Ryan's Notes, North American transaction price.

²Source: Platt's Metals Week, dealer import price.

TABLE 1
U.S. PRODUCTION, SHIPMENTS, AND PRODUCER STOCKS OF SILICON ALLOYS AND METAL IN 2002 1/ 2/ 3/

(Metric tons)

Material	Gross production 4/		Net shipments		Stocks, August 31
	August	Year to date	August	Year to date	
Ferrosilicon:					
All grades 5/ 6/	19,300	171,000	17,400	138,000	253,000
Silicon metal:					
Excludes semiconductor grades	6,110	71,100	7,820	67,800	2,460

1/ Data are rounded to no more than three significant digits.

2/ Includes U.S. Geological Survey estimates.

3/ Data for silvery pig iron (less than 25% silicon) withheld to avoid disclosing company proprietary data.

4/ Includes in-plant consumption, as in production of magnesium ferrosilicon and other miscellaneous alloys.

5/ Ferrosilicon categories were aggregated to avoid disclosing company proprietary data.

6/ Includes miscellaneous silicon alloys.

TABLE 2
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN JULY 2002 1/ 2/

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Ferrosilicon:						
More than 55% silicon:						
Canada	285	171	\$160,000	2,600	1,560	\$1,750,000
Malaysia	--	--	--	27	21	45,600
Mexico	39	27	33,900	304	197	273,000
Trinidad	--	--	--	11	6	8,590
Total	324	198	194,000	2,940	1,790	2,080,000
Other ferrosilicon:						
Australia	86	25	101,000	268	95	314,000
Brazil	--	--	--	21	11	18,200
Canada	160	80	99,600	2,540	1,270	1,550,000
China	--	--	--	48	24	13,100
India	--	--	--	23	11	13,800
Italy	--	--	--	33	17	52,600
Japan	--	--	--	336	30	717,000
Korea, Republic of	215	108	219,000	926	463	1,230,000
Malaysia	50	8	64,500	123	40	150,000
Mexico	92	46	117,000	348	174	417,000
Other (7 countries)	19	10	17,600	84	42	106,000
Total	622	277	619,000	4,750	2,180	4,590,000
Total ferrosilicon	946	475	812,000	7,700	3,970	6,660,000
Metal:						
More than 99.99% silicon:						
China	49	XX	1,450,000	274	XX	8,250,000
France	6	XX	143,000	48	XX	1,340,000
Germany	43	XX	1,570,000	200	XX	8,820,000
Italy	4	XX	769,000	64	XX	5,520,000
Japan	265	XX	13,900,000	1,810	XX	91,100,000
Korea, Republic of	35	XX	1,560,000	263	XX	10,400,000
Malaysia	5	XX	1,090,000	52	XX	10,100,000
Norway	54	XX	1,340,000	253	XX	6,510,000
Taiwan	13	XX	976,000	70	XX	3,100,000
Ukraine	14	XX	339,000	77	XX	1,930,000
Other (37 countries)	22	XX	2,540,000	186	XX	16,000,000
Total	510	510 e/	25,700,000	3,290	3,290 e/	163,000,000
99.00% - 99.99% silicon:						
Belgium	--	--	--	23	22	32,000
Brazil	--	--	--	40	39	55,900
Denmark	--	--	--	68	68	96,400
Japan	11	11	15,000	28	27	57,400
Korea, Republic of	--	--	--	20	20	28,600
Mexico	1	1	7,250	180	179	301,000
Nauru	--	--	--	51	51	72,000
Netherlands Antilles	9	8	21,100	65	64	101,000
Norway	26	25	36,000	224	222	315,000
Sweden	--	--	--	19	19	26,500
Other (9 countries)	5	5	6,540	62	62	122,000
Total	52	50	85,900	780	773	1,210,000

See footnotes at end of table.

TABLE 2---Continued
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN JULY 2002 1/ 2/

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Metal--Continued:						
Other silicon:						
Canada	97	95	\$111,000	728	707	\$906,000
Germany	65	63	85,700	254	247	335,000
Hong Kong	1	1	6,580	164	159	227,000
Japan	118	114	155,000	713	693	1,030,000
Korea, Republic of	--	--	--	216	210	434,000
Malaysia	56	55	74,400	108	105	143,000
Mexico	53	52	96,000	626	608	1,150,000
Philippines	84	82	111,000	327	318	756,000
Taiwan	161	156	340,000	356	346	604,000
United Kingdom	34	33	66,600	137	134	394,000
Other (19 countries)	37	35	185,000	340	330	937,000
Total	706	686	1,230,000	3,970	3,860	6,910,000
Total silicon metal	1,270	1,250	27,000,000	8,040	7,920	171,000,000

e/ Estimated. XX Not applicable. -- Zero.

1/ Presentation of monthly data is based on the year-to-date quantities (gross weight) of the top ten countries.

2/ Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN JULY 2002 1/ 2/

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Ferrosilicon:						
55% - 80% silicon, over 3% Ca:						
Argentina	10	6	\$11,000	67	41	\$85,000
Brazil	224	174	125,000	741	420 3/	651,000
Canada	--	--	--	21	15	6,580
Germany	--	--	--	40	12	40,500
Norway	--	--	--	6	4	10,500
United Kingdom	--	--	--	11	7	58,100
Total	234	180	136,000	885	499	852,000
55% - 80% silicon, Other:						
Brazil	--	--	--	334	250	287,000
Canada	526	401	358,000	4,400	3,310	2,880,000
China	500	375	240,000	1,520	1,140	749,000
France	582	391	1,160,000	2,120	1,390	3,860,000
Iceland	--	--	--	12,300	9,190	5,560,000
Kazakhstan	--	--	--	18,300	13,900	7,100,000
Norway	390	292	519,000	2,280	1,700	3,020,000
South Africa	849	602	401,000	4,090	2,960	1,870,000
Ukraine	--	--	--	14,000	10,500	5,850,000
Venezuela	6,890	5,170	3,750,000	28,100	21,100	15,100,000
Other (5 countries)	58	40	210,000	579	270	1,240,000
Total	9,800	7,270	6,630,000	88,000	65,700	47,500,000
More than 90% silicon:						
China	--	--	--	44	2,380 3/	220,000
Magnesium ferrosilicon:						
Argentina	190	85	122,000	712	306	459,000
Brazil	678	306	437,000	2,390	1,080	1,580,000
Canada	112	54	96,200	553	266	535,000
China	41	18	25,400	2,690	1,250	1,860,000
France	--	--	--	20	9	22,200
Germany	--	--	--	3	1	9,150
Japan	--	--	--	125	60	271,000

See footnotes at end of table.

TABLE 3--Continued
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN JULY 2002 1/ 2/

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Ferrosilicon--Continued:						
Magnesium ferrosilicon--Continued:						
Norway	1,220	567	\$985,000	5,840	2,680	\$4,770,000
Slovenia	--	--	--	4	1	6,480
Ukraine	--	--	--	18	9	7,970
Total	2,250	1,030	1,670,000	12,400	5,670	9,520,000
Other ferrosilicon:						
Brazil	16	7	11,100	36	27	45,400
Canada	1,330	452	727,000	6,800	2,420	4,860,000
China	20	10	23,700	40	20	66,100
France	--	--	--	4	1	9,060
Norway	--	--	--	23	4	18,100
Ukraine	--	--	--	119	58	54,700
United Kingdom	2	1	2,690	2	1	2,690
Total	1,370	470	764,000	7,020	2,530	5,050,000
Total ferrosilicon	13,600	8,950	9,200,000	108,000	76,800	63,100,000
Metal:						
More than 99.99% silicon:						
China	9	XX	187,000	18	XX	372,000
Cyprus	--	XX	--	54	XX	80,000
Denmark	(4/)	XX	107,000	2	XX	520,000
Germany	34	XX	4,290,000	240	XX	31,100,000
Italy	35	XX	1,500,000	199	XX	8,130,000
Japan	61	XX	1,870,000	297	XX	9,220,000
Korea, Republic of	1	XX	40,500	58	XX	966,000
Poland	--	XX	--	3	XX	16,500
Spain	1	XX	4,840	10	XX	31,600
Taiwan	--	XX	--	4	XX	83,100
Other (8 countries)	2	XX	46,400	4	XX	391,000
Total	144	144 e/	8,050,000	890	890 e/	51,000,000
99.00% - 99.99% silicon:						
Argentina	780	756	744,000	3,680	3,630	3,490,000
Brazil	5,010	4,970	6,500,000	19,300	19,200	24,600,000
Canada	510	533	647,000	5,650	5,630	6,840,000
Germany	440	437	790,000	440	437	790,000
Korea, Republic of	120	120	116,000	300	299	291,000
Malaysia	320	317	290,000	320	317	290,000
Norway	--	--	--	2,760	2,740	4,050,000
Russia	1,520	1,500	1,910,000	11,200	11,100	12,400,000
South Africa	3,100	3,080	3,440,000	12,400	12,300	13,900,000
Spain	--	--	--	1,480	1,470	1,420,000
Other (6 countries)	182	181	153,000	590	584	660,000
Total	12,000	11,900	14,600,000	58,100	57,700	68,800,000
Other silicon:						
Belgium	--	--	--	44	4	47,500
Canada	448	439	524,000	1,520	1,490	1,800,000
China	666	656	507,000	2,620	2,580	1,870,000
Germany	--	--	--	100	98	84,300
Italy	--	--	--	25	15	48,400
Norway	--	--	--	2,570	2,510	2,280,000
Russia	--	--	--	15,600	15,300	12,700,000
South Africa	2,420	2,340	2,080,000	7,120	6,960	6,500,000
Ukraine	--	--	--	21	21	16,100
United Arab Emirates	160	157	132,000	478	471	401,000
Other (4 countries)	--	--	--	11	1	18,800
Total	3,690	3,600	3,250,000	30,100	29,500	25,800,000
Total silicon metal	15,800	15,600	25,900,000	89,100	88,100	146,000,000

e/ Estimated. XX Not applicable. -- Zero.

1/ Presentation of monthly data is based on the year-to-date quantities (gross weight) of the top ten countries.

2/ Data are rounded to no more than three significant digits; may not add to totals shown.

3/ All or part of these data have been referred to the U.S. Census Bureau for verification.

4/ Less than 1/2 unit.

Source: U.S. Census Bureau.